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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,346	01/26/2001	Daithi Larkin	13841.016US1	6036
21186	7590	07/18/2006	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			JEAN, FRANTZ B	
			ART UNIT	PAPER NUMBER
			2151	

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/771,346

Applicant(s)

LARKIN ET AL.

Examiner

Frantz B. Jean

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5,7-11 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-11,13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/13/2006 has been entered.

The amendment filed on 3/13/2006 has been entered in the file.

The petition to revive this application, which has been abandoned on 08/12/2005, has been granted.

Claims 6 and 12 have been deleted in this application.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the service provider management system". There is insufficient antecedent basis for this limitation in the claim.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103 (a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3-8 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Chan et al. ("Customer Network Management and Control of Broadband VPN Services," Proc. IFIP/IEEE International Symposium on Integrated Network Management, May 1997, pp. 301-314) in view of Poisson et al. (U.S. Pub. No. 2003/003,340) and Dobbins et al. hereinafter Dobbins US patent number (5,825,772) and in view of Reichmeyer et al. (Reichmeyer) US patent number 6,286,038.

As to claim 1, Chan teaches a system comprising:

a service processing switch having a plurality of network resources allocatable to a plurality of subscribers (pg. 304, par. 2; pg. 302, par. 4; Chan discloses a CPN switch for accessing VPN services (network resources)); a service provider management server operable to configure the plurality of network resources, said configuration including an allocation of a subset of the network resources to a subscribing enterprise . . . (pg. 304, par. 2-3; Chan discloses a VPN provider (service provider management server) that allocates a portion of available bandwidth (network resources) to each VPG (subscribing enterprise)); a subscriber management server communicably coupled to the service provider management system and operable to further configure the subset of the network resources (Fig. 3; pg. 306, par. 2; Chan discloses a VPN controller (subscriber management server) which communicates with a provider (service provider management system), and allocates bandwidth (network resources) to a VPG); and a subscriber management client communicably coupled to the subscriber management server, said client operable to issue configuration requests to the subscriber management

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server (Fig. 3; pg. 306, par. 2; Chan discloses a VPG controller (subscriber management client) that interacts with the VPN controller (subscriber management server) to get additional bandwidth (configuration request) when needed).

Chan fails to teach the limitation of the service provider management server communicably coupled to the service processing switch.

However, Poisson teaches the limitation of a service provider management server communicably coupled to the service processing switch (par. 0031; Poisson discloses an ISP coupled to an extranet switch for a private network).

It would have obvious to one of ordinary skill in the art at the time of the invention to modify Chan in view of Poisson so as: to have communication between the provider and VPG via a switch. one would be motivated to do so to enable a remote user to access resources on different networks in the VPG. As per claims 3-e, the combination Chan and Poisson implicitly and explicitly teach a plurality of network resources that includes a packet filter, firewall, network address translation module, a virtual router a VPN and multiple processing elements (see Chan's fig 3-8 and section 4 of Chan reference). In addition, Chan and Poisson fail to explicitly detail on virtual routers. Dobbins is directed to distributed connection-oriented services for switched communications networks, which discloses virtual routers and virtual router directory (see 198, fig 19; col. 20 lines 51-61). Furthermore, Reichmeyer also teaches a virtual router with differing subset (subdomain router) of virtual router (fig 3; col. 5 lines 39 to col. 6 line 23). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Dobbins and Reichmeyer virtual routers to Chan and Poisson's system because they would enable resolution of reachability of destination networks (Dobbins col. 21 lines 1-4).

Claims 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan ("Customer Network Management and Control of Broadband VPN Services," Proc. IFIP/IEEE International, Symposium on Integrated Network Management, May 1997, pp. 301-314).in view of Dobbins et al. hereinafter Dobbins US patent number (5,825,772)and in view of Reichmeyer et al. (Reichmeyer) US patent number 6,286,038. As to claim 2, Chan teaches a method comprising:

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allocating by a service provider a subset of network processing resources to a subscribing enterprise (pg. 304, par. 2-3; Chan discloses that a VPN provider allocates a portion of available bandwidth to each VPG (subscribing enterprise));

receiving by a subscriber management system a configuration request related to the subset of network resources from a user within the subscribing enterprise (pg. 304, par. 3; Chan discloses that a VPN controller (subscriber management system) receives information on the need for more bandwidth in the VPG (subscribing enterprise));

forwarding the request to a service, provider management server (pg. 306, par. 2; Chan discloses that the VPN controller requests more bandwidth from the provider (service provider management system); and

processing the request by the service provider management system (pg. 307, par. 2; Chan discloses that the VPN controller arranges for the bandwidth with the provider (service ;Provider management system)).

Chan and Poisson fail to explicitly detail on virtual routers. Dobbins is directed to distributed connection-oriented services for switched communications networks, which discloses virtual routers and virtual router directory (see 198, fig 19; col. 20 lines 51-61). Furthermore, Reichmeyer also teaches a virtual router with differing subset (subdomain router) of virtual router (fig 3; col. 5 lines 39 to col. 6 line 23). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Dobbins and Reichmeyer virtual routers to Chan's system because they would enable resolution of reachability of destination networks (Dobbins col. 21 lines 1-4).

As per claim 3, the combination (Chan, Poisson, dobbins and Reichmeyer) teaches a packet filter (Poisson fig 4, 136a).

As per claim 4, the combination teaches a firewall (see Poisson paragraph 0027).

As per claim 5, the combination teaches a network address translation module (see Poisson paragraph 0033 and 0040).

As per claims 7 and 8, the combination teaches VPN and processing element (see Chan, section 2, fig 1).

Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan ("Customer Network Management and Control of Broadband VPN Services," Proc. IFIP/IEEE International, Symposium on Integrated Network Management, May 1997, pp. 301-314), in view of Dobbins et al. hereinafter Dobbins US patent number (5,825,772) and in view of Reichmeyer et al. (Reichmeyer) US patent number 6,286,038 and further in view of Poisson US publication number 2003/0033401 A1.

As per claims 9-11, the combination (Chan, Dobbins, Reichmeyer) fails to explicitly detail on packet filter, firewall and a translation module. Poisson is directed to monitoring a virtual private network, which includes packet filter, firewall and a translation module (see Poisson, fig 4, 136a; paragraphs 0027, 0033 and 0040). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Poisson's features with Chan, Dobbins, and Reichmeyer's system to prevent unauthorized access while providing security to the VPN's system (Poisson paragraphs 0029-0032).

As per claim 13, the combination teaches processing elements (see fig 1 and section 2 of Chan reference).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gilbrech (US patent Number 6,173,399) implement a VPN that includes packet filter, firewall, translation module, routers and many other features (see invention's summary).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz B. Jean whose telephone number is 571-272-3937. The examiner can normally be reached on 8:30-6:00 M-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571 272 3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Frantz Jean



**FRANTZ B. JEAN**  
**PRIMARY EXAMINER**